PORSCHE
PANORAMA

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GREATER N.Y. REGION GETS GROWING PAINS

The Greater N. Y. Region of PCA is shaping up fast, according to reports received from Doug Grewer and John Markon. Congratulations to all hands! All PCAers will be looking forward to subsequent reports on how this potential giant comes along.

Every one in the Region is being kept busy working on rallyes, drawing up the constitution and by-laws, inviting guests to meetings, getting films, working on their newsletter, etc. The Region's first rallye will take place in August out on Long Island.

They are also working up plans for time trials at Thompson in Connecticut. After they get set they are planning on inviting guests from all other PCA regions. This event will be held sometime in October...the exact date to be announced later.

John Markon will be the editor of the Greater N. Y. Region's newsletter. He'll have a lot of fun...and a lot of headaches... so we'll wait to congratulate or commiserate with him.

One of the Region's newer members is "Pup" Pupilidy who needs no introduction to Porsche owners in the East. "Pup" is a hard driving Porsche Pusher who is automatically put down for a win when he shows up for Class G production events. What we would like to see some day is PCAers like "Pup", Lake Underwood, Dick Thompson, Bengt Soderstrom, Mike Marshall and other top Porsche Pushers such as Pete Lovely, Jack McAfee & Co...all in identical cars...racing for the U. S. Porsche Championship! It's an idea.

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May-June '56

SOME GREATER N. Y. REGIONNAIRES

PCAers--reading from left to right: "Pup" Pupilidy, Boris Ohman, Warren Brown, Bud Stolitsky, Doug Grewer, John Markon, Vic Meinhardt and George Spagna... at the Republic time trials.

Otto-Erich Filius, U. S. Porsche Representative

Hermann Briem, Porsche Service Engineer

PORSCHE PERSONNEL AT "PARADE"

A large part of the improved Porsche service and facilities experienced recently, as well as the closer cooperation between the factory and the PCA, is the direct result of the enthusiastic efforts of the two good-looking gents pictured here. You may have met them already as they manage to get about ...both being in Calif. at the moment...but they will be on hand to say hello and give us a few Porsche Pointers at the "Parade."

Erich Filius, the U.S. Porsche Representative, was born in Duisburg, Germany. He attended the International College in England and was in the Luftwaffe during the war. He joined the Volkswagen organization after the war and when Porsches first appeared on the market in 1950 was in charge of Porsche sales in Hamburg. He later operated his own export agency and joined the Porsche factory in 1955. He arrived in the U.S.A. in October of the same year and has been working closely with PCA to understand and help to clear up the Porsche difficulties in the U. S.

Hermann Briem was the 40th employee of the Porsche "family" having joined them in 1950 in the Production department as a master machinist. He spent more than a year in the Race department and then went into Service and Trouble Shooting, and later Technical Inspection. He came to this country in January of this year and helped Herb Linge operate the Porsche School at Hoffman's, N. Y. You may have seen him tuning Spyders at Sebring, Cumberland, Elkhart Lake and other points, North, East, South and West, wherever our "babies" have been cleaning up this year. There isn't very much that Hermann doesn't know about the insides, outsides, and undersides of our favorite brand. We are looking forward to learning more about our Porsches at the "Parade" from these two very cooperative members of the Porsche "family."

While we have not received the "dope" on Karl Grassow, the genial Hoffman-Porsche Service Manager, we are looking forward to having him with us too, and also Herbert Dramm, Porsche Consulting Engineer now stationed in New York.

KUDOS

Vic Meinhardt-N. Y. won the Class E event at an Autocross sponsored by the Long Island Sports Car Association in May. Driving a '55 Speedster Super, Vic's best time at the Sayville, L. I. Airport was four seconds behind the Class C. winner, a Mercedes 300SL. Overall, he placed third in a field of 78!

E. M. Pupilidy-N. Y. took a Class F win in the same event, driving a '53 1300 Coupe. Please note this you 1500ers!

Warren Brown-N. Y., in his initial test of competition, drove his '53 1300 Coupe to a 5th in Class.

Howard Miles-Wash. took his second fling at racing in the SCCBC competition at Abbotsford, B. C. on May 27, and placed a creditable third in the under 1600 Production race, despite a couple of spins and a rough engine. Howard trailed two MGAs, warns "Look out for them!" He reports that the MGAs are taking the Porsches out in the Northwest...tho there is only one Carrera and no 1600s racing in that area at this time.

Gamble and Elizabeth Mann-Va. copped First Overall and First in class (under 1600 cc) in the Potomac Region's first invitational all-nite rallye in May.

Jim Richeimer-Va., navigating for Harvey David (a MG pilot who is practically an honorary member of PCA since he always navigates for Don Kinney-Md.), took Second Overall and Second in class in the same rallye.

Ken and Marguerite Twigg-Va. took home Third place hardware in this rallye...which will be an annual open event. Put it down on your calendar for May, 1957. Practically all competitors agreed that the rallye course thru the Maryland mountains was one of the best they've seen. Jim Healey-Md. and Don Kinney-Md. are the "schemers" on this one.

TERRY CLOTH SEAT COVERS

June Syze-Mich. has discovered a college prof up her way that has made terry cloth seat covers for his Porsche out of 4 large bath towels. She reports the results really look good. June is now trying her hand at it and promises to try to compose some simple, logical directions on how-to-do. Sounds promising as a relief from sizzling leather seats, for Porsche beach and pool wear, etc.

Listed below are new PCA members since last issue of Panorama. Total membership now 298. We've just started our growth. Keep the word circulating!

CALIFORNIA

Charles D. Kuhn
1118 Sir Francis Drake Blvd.
Apt. 106
Kentfield

CONNECTICUT

Merwyn Jamieson
Brookmead Farm
Canaan, RFD

W. Patrick Brewster
Hill Street
Suffield

William Brewster
Hill Street
Suffield

Ernest I. Kearns
Main Street
Suffield

DISTRICT OF COLUMBIA

Robert L. Tosch
2122 Massachusetts Ave., N.W.
Apt. 206, Washington 8

FLORIDA

Martin Barber
329 Second Avenue
Daytona Beach

William J. Hildebrandt, Jr.
5418 della Robbia Way
Jacksonville

Dr. Harry E. Fry, Jr.
1300 Coral Way
Miami

Michael Marshall, Jr.
2100 Biscayne Blvd.
Miami

ILLINOIS

James S. Abbott, III
2905 Colfax
Evanston

KANSAS

Stewart P. Verckler
300 N. Cedar Street
Abilene

MARYLAND

Zigurds J. Levensteins
9710 T. U. Det. #3
Army Chemical Center, Md.

Ralph E. Reynolds
10103 McKenney Avenue
Silver Spring

MICHIGAN

Peter L. Young
8459 Braile
Detroit 28

MISSOURI

Dr. A. F. Staeger, Jr.
Ash Grove

NEW JERSEY

Donald C. McDonnell
7 Roth Street
East Paterson

Fred M. Linda
5th and Olive Streets
Florence

Robert E. Hammett
26 Hillside Avenue
Glen Ridge

Bengt Soderstrom
Essex Sports Cars, Inc.
15 Valley Street
South Orange

Jerry Sullivan
Essex Sports Cars, Inc.
15 Valley Street
South Orange

Lake Underwood
Essex Sports Cars, Inc.
15 Valley Street
South Orange

NEW YORK

Don Berliner
480 Lefferts Avenue
Brooklyn

Arthur K. Peck, Jr.
Ocean Avenue
Cedarhurst, Long Island

Cdr. Justin F. Stolitsky
CVA 60
FPO, New York

E. M. Pupilidy
127 Lillian Avenue
Freeport

Douglas R. Vining
48 West Main Street
Norwich

NORTH CAROLINA

Lt. Col. S. C. Agnew
3114 Ashel Street
Raleigh

OHIO

Clem L. Bauman
3340 Glen Helen Road
Dayton 6

Jerry Weis
401 Leo Street
Dayton

PENNSYLVANIA

Richard Jayne
213 Canterbury Drive
Broomall

Harold H. Landis
420 Linden Street
Lititz

SOUTH CAROLINA

Harold S. Neal
Palms Motor Court
Myrtle Beach

TEXAS

Donald W. Janssen
R.F.D. #1, Box 18
Nixon

VIRGINIA

Thomas R. Lusk
305 N. Braddock Road
Alexandria

Capt. Dorothy Scharf, WAC
Headquarters Co.
Ft. Myer
Arlington 8

Capt. Raymond J. O'Leary, USMC
Qtrs K-4, MOS
Quantico

WASHINGTON

James P. Thompson
S. 12th Avenue at Spruce
Yakima

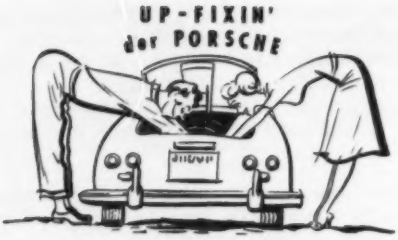
WISCONSIN

Walter J. Schacht
Elm Grove

William F. Schanen, Jr.
c/o Ozaukee Press
Port Washington

GERMANY

Frithjof P. Lindemann
Friedr.--Engelsstrasser 31
Kaiserslautern



YOUR CLUTCH

One of the items in the Porsche which has a high incidence of failure within the warranty period as well as after is the clutch. It is our opinion that since the factory introduced the three-piece crankcase engine with all its improvements the weakest link in the whole car is the clutch system. In this article we are going to point out some parts failures, their repair and some good driving habits.

We should all realize that the Porsche engine started as a souped up VW. All two-piece crankcase engines were only modifications of the basic VW design, a 25 HP engine of relatively low RPM. Some of the changes include larger main and connecting rod bearings, increased compression, dual carburetors and, in the case of the Super even higher compression, higher lift cams, different timing gears, different pistons and roller connecting rod bearings. Beginning with the '55 three-piece engines there was a complete redesign so that you have an engine performing as it was conceived. The crankcase is made of a tougher aluminum alloy, the cam follower surface is larger, there are new engine-transmission mountings, etc. The cars with 1600 cc engines have a redesigned suspension and steering and still another engine-transmission mounting. The 1600 appears so good that it may put your Technical Editor out of business. Except for the installation of a longer clutch operating lever in the '55, a ball throw out bearing, increased spring pressure in the clutch, and a synchronized first gear the clutch and transmission have remained nearly the same. As the cars are used in Europe there appears to the factory to be no need for changing these two items. However, with the congested type driving we have in the U.S.A. the clutch is not entirely satisfactory to the owners or the factory. We don't believe that it is congested driving conditions alone that have caused clutch troubles in this country. The automatic transmission has been here long enough so that some of us may have forgotten the finer points of clutch technique. Others may never have used a clutch.

CLUTCH THROW-OUT BEARING

This bearing is on the end of the clutch pedal actuating system and transmits the clutch pedal motion to the clutch assembly. It must withstand a clutch thrust pressure of approximately 200 pounds. The original VW design was a graphite bushing. This would not stand up under the increased spring loading that was put into the Porsche so it was changed to a fiber surfaced ball bearing on the very first Porsches. The fiber did not stand up so it was changed to graphite in 1952-1953 and has remained the same. Very little trouble has been experienced with this design.

The symptom of a bad bearing is the typical sound of a bad roller bearing when the clutch pedal is depressed. There is only one solution to this problem--replace the clutch throw-out bearing. This requires removal of the engine.

In order to extend the life of the throw-out bearing you should NOT keep the clutch down any more than necessary. Most of the wear on this bearing occurs when you are waiting for the red light to change.

CLUTCH CABLE

The clutch cable transmits the pedal motion to the clutch operating lever just outside the flywheel housing on the left side, top. It is a twisted steel cable with 4-5 inch threaded rods at each end. The front and piece of the cable fits into an eye at the bottom of the clutch pedal. Both ends of the cable are identical. The back end of the cable fits into an eye at the top of the clutch operating lever. The expression "broken clutch cable" does not mean that the cable itself is broken. In all cases known to us it is the threaded rod at the back end which breaks.

We do not know of any symptoms which will be noticeable during normal operation that will provide a warning. Nearly all failures have been on '53 models. (It may be that later models have not aged sufficiently.) If you could conveniently inspect this rascal you might detect a sign of weakness.

If you have a spare cable with you, it can be installed in about half an hour. If you don't like the wide open spaces for this type repair, it is possible to drive your car to a service station or garage PROVIDED you know how to shift without a clutch. John Snyder of the Potomac Region drove over 200 miles in a rally over mountains without help of a clutch cable and placed third for the day.

In order to start the car put it in 1st gear and let the starter get you going. To shift gears you will have to feel gently for meshing gears. This business is for emergency only unless you are familiar with no clutch shifting. A new transmission is an expensive item! The clutch cable replacement. procedure is:

1. Remove front floor boards and pull out old cable from the eye in the clutch pedal.

2. Remove lock nut and adjusting nut (one side has spherical sector) from both ends of the new cable.

3. Insert one end into the conduit under front seat and push back until the rear end appears out of conduit near the flywheel housing. The cable should be well lubricated with universal grease before inserting in conduit.

4. If you are not on a grease rack it is a good idea to jack up the left side and remove the rear wheel. Now shifting position to the left rear side, pull the end of the cable through the clutch operating lever eye and out to the side so that it is convenient to work on.

5. Screw on the adjusting nut with the spherical surface forward about one inch and lock it with the lock nut. This locking nut should be just tight enough to hold the adjusting nut. If you tighten too much you can weaken the threads and cause another break.

6. Thoroughly clean off the rear eye and grease well.

7. Push cable forward and from the front seat thread the end of cable into pedal eye.

8. Screw on adjusting nut, spherical surface to rear, until there is correct play in the pedal movement, 0.6 to 0.8 inches. Now tighten lock nut. A little grease should be applied under spherical seat.

9. Replace floor boards.

NOTE: By leaving only ½ inch of threads on the back side of the lock nut at the clutch operating lever eye it is sometimes possible to re-use that cable. Since a broken cable will cause you to lose the rear adjusting and lock nuts, you will need replacement nuts for them. If no more than a ½ inch of threads are left when installing there will be enough threads remaining to screw on the replacement nuts after a break. In order to use the threads remaining on the rear end you will have to loosen the front end adjustment. Use the old cable only until a new one can be installed.

Two preventative measures are: Keep the rear adjusting nut and eye well greased and keep the clutch pedal play correctly adjusted.

ENGINE SUPPORT BRACKET

There are two rubber pieces which take the engine and transmission load. They are located between the flywheel housing and the U-shaped one inch pipe that passes under the flywheel housing. This pipe is fastened by a large bolt on either side of the engine firewall near the bottom.

There have been at least three designs of the rubber engine-transmission mounts. Sometimes these rubber mounts become excessively elastic or loose and cause the engine-transmission to jump around. This could cause clutch trouble and excessive wear of the shifting fork.

The symptom of trouble is a "nervous" gear shift lever, with excessive lateral motion whenever power is applied. In time, the shift lever will slap you on the leg when in 2nd gear on a rough road.

The only repair is to replace the rubber mounts which necessitates removing the engine. The 1600's have a redesigned mount which can be adapted to earlier models, tho the replacement cost is considerably higher than when the older rubber mounts are used.

We know of no preventative measures unless it is to be sure no oil or grease get on the rubber mount.

CLUTCH RELEASE PLATE

This plate is circular and about 2½ inches in outside diameter with a one inch hole in the center and about ½ inch thick. The clutch release plate transmits the clutch pedal motion from the throw-out bearing to the clutch pressure plate. The side that bears on the throw-out bearing is machined smooth, the other side presses on the three clutch fingers. When you remove the engine, the release plate is the part which is farthest forward on the clutch assembly. It can easily be removed by lifting three wire retaining springs.

The older Porsches, 1500 up to engine No. 33,450 and 1500 Supers up to engine No. 40,923 had a soft steel release plate. These plates were soft enough to permit the three release fingers to dig into the release plate. If this wearing is not stopped it will cause the fingers to become wrapped around the throw-out arm, among other things. The later engines come with a tougher release plate which has a part No. 546.16.202.

Symptoms of trouble are a slight roughness when depressing the pedal. Unless you are feeling for this roughness you probably will not notice it. A strange thing which we cannot explain is that the roughness only occurs when the engine is running. A good clutch condition will give a perfectly smooth feeling when depressing the pedal.

Repairing is accomplished by pulling out the engine, lifting the three retaining springs on the release plate and removing the plate. Now you can insert the new release plate. This sounds simple...and is... except for some alignment that goes with the job. The alignment requires:

1. That the machined surface of the plate be 1 1/32" from the flywheel. This is easily measured with a straight edge and scale.

2. That the machined surface of the plate be parallel with the flywheel. This can be measured with a dial indicator while turning over the flywheel. The maximum whip or non-parallelness is 0.012". This means that one side may be down 0.006" and the other up 0.006".

After you have checked these alignments, if they are incorrect, turn the plate 1/3 turn and try again. If it does not align, turn again to the third position and measure. If it still does not line up and you are not an expert on VW or Porsche clutches, take it to or call in an expert who has a shop manual. The additional work required to meet the specifications will include renewing and adjusting the special pressure plate bolts and nuts.

There are no operating preventative measures.

SUMMARY

The best method of giving your clutch a fair chance is to treat it well. Here are a few hints;

1. Don't wait through the whole red light period with the clutch pedal down.

2. Keep the clutch pedal all the way up or all the way down at all times. Don't hesitate in the middle or "ride" the clutch.

3. When shifting down, run the engine speed up so that the flywheel and pressure plate are close to the speed of the clutch plate or disc. We know the Porsche advertises that this is unnecessary, but it will give you better clutch life. You will be shifting properly if the car does not jerk when you let up the clutch pedal.

AIR SCOOP

Tom Donaldson, late of the U. S. Navy, is continuing his college training down Texas way. In anticipation of some sizzling Texas weather, he has designed a small aluminum air scoop that fits onto the window glass of his Coupe. Tom says it makes all the difference in the world in driving comfort in a Coupe on a hot day. We can't reveal any more details at this time as Tom is toying with the idea of having some made up for sale to perspiring Porsche Pushers. Wish somebody would come up with a similar scheme for Speedsters. In 90-100° weather a Speedster owner has the dubious choice of parboiled brains with the top down or suffocation with the top up... unless his arms and legs are long enough to drive with the bucket seat shoved all the way back.

Editor-in-chief
R. Gamble Mann

Technical editor
Ray Pitts

Foreign editor
Fred W. Schulenburg

Advertising manager
John P. Snyder

Production manager
William J. Sholar

Foreign correspondent
Louis Hilton

Porsche Panorama mailing address:

R. Gamble Mann
810 Vicar Lane
Alexandria, Virginia

Porsche Club of America mailing address:

William J. Sholar
1542 Mt. Eagle Place
Alexandria, Virginia

This issue of Panorama is the "economy model"...necessitated by: (1) A thinning pocketbook; (2) A lack of contributions of material by the membership. Under the circumstances, we feel it is desirable to save a little money rather than generate "stuffing" merely for the sake of using up paper and printer's ink.

Administrative costs, postage, badges, etc. have been running a bit higher than originally estimated. That means less funds are available for Panorama. This does NOT mean PCA is going "broke." All badges are paid for, there are no outstanding bills and we still have a fair sized hunk of cash in the bank to help see us thru the year.

No drastic curtailment of this publication is now contemplated. As near as we can "guestimate" there will be sufficient funds available to continue issuing Panorama as planned. We are just playing it safe rather than risk the possibility of depleting the Treasury before the fiscal year comes to an end. As the financial picture clears we hope and anticipate that we will be able to resume the regular full length edition...with the cooperation of all PCAers.

One method of cooperation is for all hands to get busy rounding up new members. With a little salesmanship by each one of us we could double the present membership of 298 by the end of the year. The more PCAers, the lower the cost of Panorama per copy. It is as simple as that!

BUG SCREEN

Some aluminum foil, kitchen variety, smoothed across the nose of the Porsche and taped down with masking tape makes an effective bug screen for your car...and saves a lot of elbow grease in trying to get it clean after a long trip. Tom Donaldson also came up with this idea. On his Apple Green Coupe it looked like a million bucks.

TYPE 356 A PORSCHE MODIFICATIONS

The following Engine and Transmission modifications were adopted by the Porsche factory effective as of October 15, 1955. They are applicable beginning with Engine numbers 22246---1300, 50127---1300S, 60001---1600; 80001---1600S, and 90501---1500GS.

In a later issue of Panorama we will list the chassis modifications for the Type 356 A Coupe, Convertible and Speedster.

MODIFICATIONS

Engine	356/a	356
Engines	1300 1300 S 1600 1600 S 1500 GS	1300 (506/2) 1300 S (589/2) 1500 (546/2) 1500 S (528/2)
	Except the engine type 547/1 1500 GS all engines are provided with engine compartment heating to preheat the carburetors. The heating is automatically controlled by a thermostat	
1300, 1300 S, 1600, 1600 S fuel pump	Solex-diaphragm pump, dome type with filter	Solex diaphragm pump
Fuel filter	filter in fuel pump	fuel refining filter in front of fuel pump
Oil temperature gauge	mechanism for oil temperature gauge in crankcase (near pulley in oil sump)	mechanism for oil temperature gauge on front part of crankcase (near flywheel)
Fuel line connection	fuel line connection modified (dome pump ring connection)	nipple with cap nut Solex - M - P
Carburetor (1300 S and 1600)	Solex 32 PBIC without carburetor for starting (independent idling)	Solex 32 PBI with carburetor for starting (dependent idling)
Carburetor compensation line (1300 S and 1600)	running along upper edge of fan housing	running below and along blower suction opening
Crankshaft Alfing 1300 and 1600, as of 1.12.55	re-inforced, new oil bores (and heavier flywheel as of 1.1.1956	
Piston and Cylinder 1600 and 1600 S	bore 82.5 mm Ø	bore 80 mm Ø 1500 and 1500 S
Piston and Cylinder	piston- and cylinder form modified (longer piston skirt)	
Oil cooler rubber sealing	Silicon rubber	oil-tight rubber
Suction tubes 1300 S and 1600	casted (modified form)	1300 S sheet metal suction tube
Cylinderhead 1300, 1300 S, 1600 and 1600 S	enlarged distance of the valve seats, shim plates for valve springs	

Blower grill	more flat (approx. as of 1.12.55)	
Clutch throw out bearing	sintering metal ring for 547/1 1300, 1300 S, 1600 and 1600 S with graphit ring	
Cross shaft	three-times mounted	two-times mounted (VW)

MODIFICATIONS

Transmission	356/A	356
Transmission and cover	with 2 arms to seat the silentblocks	519.20.059 seat for front gear box mounting in center
Front gear box suspension	2 silentblocks	519.20.522 1 silentblock
Transmission hanger	6 holes, 2 larger silentblocks (3 fastening screws each), additionally 2 counter sunk screws	2 silentblocks
Inner gear change lever	modified	519.20.247
Clutch cable retaining angle	modified, 12 mm Ø (inside)	10 mm Ø (inside)
Transmission cover rubber sealing	grommet	foam ring
Stud	additional stud (between roller bearing of the bevel pinion and the ball bearing of the main shaft)	
Bevel pinion roller bearing and main shaft ball bearing	provided with fixing pin for type Carrera	
Transmission ratios	engine 1300 S	1300 S (589/2)
	3rd gear 22:27 4th gear 26:23	23:26 26:23
	engine 1500 GS	
	3rd gear 22:27 4th gear 25:24	
Clutch lever	modified to 80 mm and differently bent, fine toothing	90 mm
Clutch spring	modified	356.16.302

Merle Gray-Mo. and "Guess What?"

June Syze and Late Friend